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## Declarations under Rule 4.17:

- as to the identity of the inventor (Rule 4.17(i))
- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))
- of inventorship (Rule 4.17(iv))

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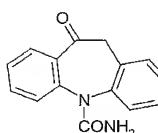
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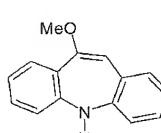
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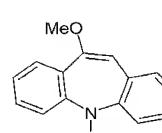
(54) Title: A PROCESS FOR THE PREPARATION OF 10,11-DIHYDRO-10-OXO-5H-DIBENZ[B,F]AZEPINE-5-CARBOXYLIC ACID



(I)



(II)



(III)

(57) Abstract: A process for preparing 10,11-dihydro-10-oxo-5H-dibenz[b,f]azepine-5-carboxamide, compound of formula (I), said process comprising a. reacting compound of formula (Ivb) with alkali metal methoxide to yield compound of formula (II); and b. converting compound of formula (II) to compound of formula (I).

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# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/IN 2005/000077

**A. CLASSIFICATION OF SUBJECT MATTER**

IPC<sup>8</sup>: C07D 223/28 (2006.01)i, C07D 223/22 (2006.01)i

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)

IPC<sup>8</sup>: C07D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

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Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)  
WPI, EPODOC, PAJ, REGISTRY, CAPLUS

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US3642775 A (SCHINDLER WALTER) 15 February 1972 (15.02.1972) ; cited in the application <i>example 1.</i> --	1-13
A	US5808058 A (MILANESE A) 15 September 1998 (15.09.1998) ; cited in the application <i>schemes A, B, H, G'.</i> --	1-13
A	GB943277 A (GEIGY AG J R) 4 December 1963 (04.12.1963) ; cited in the application <i>claims 1, 2.</i> --	1-13

Further documents are listed in the continuation of Box C.

See patent family annex.

\* Special categories of cited documents:  
"A" document defining the general state of the art which is not considered to be of particular relevance  
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"P" document published prior to the international filing date but later than the priority date claimed

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"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone  
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"&" document member of the same patent family

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## INTERNATIONAL SEARCH REPORT

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## C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	AT7206873 A (C FINDEISEN) 15 May 1975 (15.05.1975) <i>compound III, page 2, claim 1.</i> --	1-13
A	US4775691 A (LEUTWILER A) 4 October 1988 (04.10.1988) <i>example 1, (iib).</i> ----	1-13

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.  
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Patent document cited in search report		Publication date	Patent family member(s)		Publication date
AT	A	7206873		none	
GB	A	943277	1963-12-04	CH A 392515 ES A1 262485	1965-05-31 1961-06-01
US	A	3642775		MY A 19476 HK A 51976 KE A 2635 US A 3716640 PL B1 80549B IL A 34026	1976-12-31 1976-08-27 1976-06-11 1973-02-13 1975-08-30 1972-12-29
US	A	4775691	1988-10-04	HU A2 46903 ZA A 8609296 IT B 1214756 SE A 8605255 PH A 24024	1988-12-28 1988-07-27 1990-01-18 1987-06-10 1990-02-09
US	A	5808058	1998-09-15	GR T3 3034844T PT T 847390T ES T3 2150093T WO A1 9621649 EP A1 0847390	2001-02-28 2000-11-30 2000-11-16 1996-07-18 1998-06-17